Modern Castings' 1961 Editorial Index

New Technology—Marketing Opportunities—Management for Profit—Technology for Profit—Operations for Profit. The combined efforts of over 145 individual authors contributed to the advancement of metalcasting in 1961. January-December Volumes 39-40.

AEROSPACE CASTINGS

Aerospace Industries Demand Integrity in Every Casting, April, p 35

Aerospace Industries . . . Stepping Stone to New Castings Markets, April, p 38

Aircraft-Missile Steel Castings: S. A. McCarthy, Feb., p 110

Casting High Integrity Steel, April, p 40

Castings Play Vital Role In Space Travel, Oct., p 52

High Strength Aluminum Alloy Airframe Castings: W. A. Bailey and E. N. Bossing, Oct., p 86

High Strength Aluminum Casting Alloy M517-T61: W. A. Bailey, E. N. Bossing and F. H. Roebuck, Dec., p 110

High Strength Structural Steel Castings For Aerospace Applications: W. R. Roser, Aug., p 109

Horizon Requirements For Castings: S. R. Carpenter, Sept., p 96

Magnesium-Silver-Didymium-Zirconium Casting Alloy QE22A: D. J. Whitehead, Sept., p 102

Precision In The Foundry: A. Short, Sept., p 69

Weldable As-Cast Nickel Aluminum Bronze Composition and Microstructure: M. L. Foster and S. Goldspiel, Feb., p 72

AIR POLLUTION CONTROL

Dust And Vapor Control For Shell Molding Operations: Elijah B. Henby, Oct., p 65

Foundry Air Pollution Control In The San Francisco Bay Area: B. Linsky and G. Aase, Nov., p 111

ALUMINUM

Aluminum Alloy 356+ Be Permanent Mold Casting, Aug., p 98

Aluminum Furnace Refractories: C. H. Schweinsberg and J. L. Dolph, Aug., p 81

Aluminum Pattern Castings: W. E. Sicha, Oct., p 71

Aluminum-Uranium Alloy Centrifugal Casting: N. E. Daniel, E. L. Foster and R. F. Dickerson, Jan., p 53

Bright Future Forecast for Aluminum Castings: J. H. Schaum, Jan., p 48

Die And Permanent Mold Casting Aluminum Alloy Minor Elements: D. L. Colwell and R. J. Kissling, Dec., p 60

Factors Affecting Soundness In Alloys With Long And Short Freezing Range: J. T. Berry and T. Watmough, Jan., p 63

Fluidity of Aluminum Alloys: M. C. Flemings, E. Niijama and H. F. Taylor, Dec., p 75

Grain Refinement, Nov., p 60

High Strength Aluminum Alloy Airframe Castings: W. A. Bailey and E. N. Bossing, Oct., p 86

High Strength Aluminum Casting Alloy M517-T61: W. A. Bailey, E. N. Bossing and F. H. Roebuck, Dec., p 110

How To Grain Refine High Silicon-Aluminum Alloys, Jan., p 38

Hypereutectic Aluminum-Silicon Casting Alloys Phosphorus Refinement, March, p 61

Initial Bubble Test For Determination of Hydrogen Content in Molten Aluminum: D. J. Neil and A. C. Burr, June, p 86

Instant Power . . . For Standby Emergencies, Jan., p 34

Light Alloy Grain Size Control and Supercooling Measurements, V. B. Kurfman, April, p 98

Lightweight Cellular Metal: L. Polonsky, S. Lipson and H. Markus, Feb., p 57

Maximizing Soundness In Aluminum Die Castings: L. M. Elijah, July, p 96

Melting Practice For Aluminum Die and Permanent Mold Casting, April, p 50

Mold Variables Influence On Fluidity of Aluminum: M. C. Flemings, F. R. Mollard and H. F. Taylor, Nov., p 100

New Growth Slated in 1962 For Die Casters, Dec., p 38

New Sand Mix Doubles Core Production, March, p 54

Tilt Pouring Permanent Mold Aluminum Castings: G. W. Stahl, Oct., p 68

Vacuum Die Casting—A New Evaluation, June, p 56

AMERICAN FOUNDRYMEN'S SOCIETY

Admits 15th Student Chapter, Sept., p 139

Broadening AFS Research Calls For Dues Revision, June, p 98

Chapter Officers' Conference, Local Officers Get Inside View of AFS Operations, Aug., p 122

Clemson Gets Books, Foundry Equipment, Jan., p 129

Cooperative Training Program Gets Student Approval, Feb., p 134

Division Changes Announced by AFS, April, p 112

Divisions Continue Work on Research, Jan., p 124

Eight Foundrymen to be Honored at 65th AFS Castings Congress in May Feb., p 124

Hunt, A. L. Named AFS President, June, p 101

Install Newest Chapter at Ryerson Institute, June, p 112

Jeffery, W. C. Named as Foundry Education Foundation Trustee, Feb., p 124

Largest Apprentice Contest Draws 129 Entries, Winners From Coast to Coast, June, p 100

Nevins, M. E. Named as AFS Director, April, p 112

New National Directors, June, p 98

Nominate Society's Officers, Directors, Jan., p 124

Nominating Committee to Select Candidates, Nov., p 139

Sand Committees Report on Status, April, p 113

Select Wagner Vice President, June, p 101

Societies Start Joint Research Investigation, March, p 128

Start on New Test Standards, July, p 116

Technical Council Outlines Program, July, p 114

AFS 65TH CASTINGS CONGRESS EXPOSITION

Caine, J. B. Scores Timidity of Designers and Engineers, May, p 87

For the Ladies . . . Fashions and Frills On The Distaff Side, June, p 108

Industry Leadership . . . Men Who Made News at the AFS Castings Congress, June, p 102

Name Host Chapter Ladies Entertainment Committee, Nov., p 138

Name Representatives for 1962 International Congress, Aug., p 117

National Castings Council Co-Sponsors Congress and Exposition in Detroit, Nov., p 138

New Techniques for Expanding Foundry Markets Emphasized at 65th AFS Castings Congress, June, p 96

105 Top Technological "Breakthroughs" for 1961, May, p 69

Signing of AFS Sponsored Ground Rules at Detroit Marks New Era for Shows, Aug., p 114

Spotlight on New Technology . . . New Fiber of Metalcasting, June, p 106

Use World Cities in AFS Show

Plan, 66th Castings Congress & Exposition—May, 1962, July, p 116

AFS REGIONAL FOUNDRY CONFERENCES

Cutting Costs and Improving Quality Stressed at East Coast Regional, Nov., p 141

Emphasize Production Techniques at 29th Southeastern Regional, April, p 116

Michigan Foundrymen Aim at Meeting Customer Tolerance Requirements, Dec., p 124

New England Metalcasters Told to Squeeze Costs with Better Controls, Dec., p 123

Ohio Regional Focuses on Technology Customer Relations for Expansion, Nov., p 142

Penn State Speakers Stress Quality As Key to Future, Aug., p 120

Re-evaluate Now to Compete in Future Missouri Foundrymen Hear at Regional, Nov., p 140

Stress Research, Reliability at 24th Wisconsin Regional, April, p 114

Stress Production Techniques at Michigan Regional, Jan., p 126

Warn Industry Must Be Alert to New—Re-examine Fundamentals to Survive, Dec., p 122

AFS TRAINING & RESEARCH INSTITUTE

AFS Board Gives T&RI Expansion Green Light, Oct., p 36

AFS Technical Program Wins Tax Exemption by New U. S. Ruling, Aug., p 116

Board Action Paves Way for Expansion of Broad T&RI Educational Program, Oct., p 132

Course Presents Buying Principles, May, p 121

Durdin, L. H. Heads T&RI Trustees, June, p 110

Industry Acceptances Helps Expand T&RI Program, Dec., p 28

T&RI Announces 1961 Courses for Upgrading Personnel, Jan., p 123

Training & Research Courses Stress Production Control, April, p 113

AROUND THE WORLD

Jan., p 11	July, p 10
Feb., p 11	Aug., p 11
Mar., p 17	Sept., p 15
Apr., p 13	Oct., p 13
May, p 9	Nov., p 11
June, p 11	Dec., p 13

AUTOMOTIVE

Bright Future Forecast for Aluminum Castings, Jan., p 48

Die Cast Zinc Meets Competitive Demands, Aug., p 34

Ductile Iron Youngster With A Bright Future, Oct., p 53

Malleable Iron—Past, Present, Future, March, p 49

New Growth Slated in 1962 For Die Casters, Dec., p 38

Selling the Automotive Casting, Sept., p 41

Shell Molding and Ductile Iron—New Profit-Making Team: Arthur Adams and Harold Grant, Nov., p 52

BRASS & BRONZE

Accurate Time From A Cast Sun Dial, April, p 45

Aluminum Bronze Hard Spots: Norman A. Birch, Sept., p 117

Bronze Alloys Electric Melting and Quality Control: R. E. Barone, T. F. Godfrey and R. A. Rosenberg, March, p 103

Bronze Valve Vertical Gating in Shell Molds: F. E. Murphy, G. J. Jackson and R. A. Rosenberg, July, p 81

Cast Nickel Containing Aluminum Bronze Properties and Micro-structure: E. Belkin, Aug., p 87

CO_2 Techniques Mean New Profits for Small Foundries: F. H. Donnelly, D. Longeuville, July, p 34

Grain Refinement, Nov., p 60

High Strength Yellow Brass Castings Weld Repair: Donald K. Fox, Oct., p 89

New Alloy Strengthens Valve Stems, Sept., p 45

New High Strength Dezincification Resistant Bronze Casting Alloy: A. H. Hesse, Dec., p 51

Weldable As-Cast Nickel Aluminum Bronze Composition and Microstructure: M. L. Foster and S. Goldspiel, Feb., p 72

We Must Sell Castings Harder Than Ever Before, June, p 49

BUSINESS

Modern Castings Trends Panel Survey:

May, p 45	Sept., p 48
July, p 7	Nov., p 50

Modernization Spurs Rail Comeback, July, p 31

Sales Engineering—Success Story at Superior Steel: J. W. Lane, July, p 38

CASTING

Accurate Time From A Cast Sun Dial, April, p 45

Cast Metals and Cast Shapes, 1961 Hoyt Memorial Lecture: J. B. Caine, June, p 73

First Success With Cast Uranium: G. D. Chandley, D. G. Fleck and B. W. Crocker, Watertown Arsenal, Oct., p 41

Precision in The Foundry: A. Short, Sept., p 69

Structural Uranium Alloy Melting, Casting and Heat Treating Techniques: G. D. Chandley and D. G. Fleck, Aug., p 56

CASTINGS

Casting a Heartbeat: Leo E. Carr, Dec., p 36

Casting a Shaft for the "Big Ear," March, p 40

Casting High Integrity Steel, April, p 40

Castings Play Vital Role In Space Travel, Oct., p 53

Cast Steel Bells Ring True, Sept., p 50

Cast Metals and Cast Shapes, 1961 Hoyt Memorial Lecture: J. B. Caine, June, p 73

Farm Mechanization Growth Expanding Market for Castings, Feb., p 48

High Strength Aluminum Alloy Airframe Castings: W. A. Bailey and E. N. Bossing, Oct., p 86

High Strength Structural Steel Castings For Aerospace Applications: W. R. Rosher, Aug., p 109

How Castings Carry The Mail, April, p 48

Instant Power . . . For Standby Emergencies, Jan., p 34

Modernization Slashes Costs, Castings Replace Stampings, Feb., p 44

Ordnance—Unlimited Potential for Castings, Nov., p 45

Precision In The Foundry: A. Short, Sept., p 69

Selling the Automotive Casting: J. H. Schaum, Sept., p 41

We Must Sell Castings Harder Than Ever Before, June, p 49

CENTRIFUGAL CASTING

Aluminum Alloy 356+Be Permanent Mold Casting: A. J. Iler, Aug., p 98

Aluminum-Uranium Alloy Centrifugal Casting: N. E. Daniel, E. L. Foster and R. F. Dickerson, Jan., p 53

Centrifugally Cast Steel Cylinders Rapid Gas Heating Techniques: A. Ayvazian, Aug., p 73

CLEANING & FINISHING

Automatic Grinding Saves Time, Men, and Money: John W. Lane, Aug., p 40

Evaluating Cleaning Room Materials, Nov., p 57

COPPER-BASE ALLOYS

Copper-Base Casting Alloys: R. A. Flinn and H. Kunsmann, April, p 72

Grain Refinement, Nov., p 60

CORES

Core Production in Hot Core Boxes: P. Jasson, July, p 55

CO_2 Techniques Mean New Profits for Small Foundries: F. H. Donnelly, D. Longeuville, July, p 34

Hot Core Box Design and Engineering: E. E. Harkess, Feb., p 115

New Sand Mix Doubles Core Production, March, p 54

New Furfural Binders Reduce Core Cost, Jan., p 31

COSTS

Cost Control Through Process Quality Control: C. E. Haney, Oct., p 110

Establishing Work Standards By Sampling: E. C. Keachie, Dec., p 114

Evaluating Cleaning Room Materials, Nov., p 57

Horizon Requirements For Castings: S. R. Carpenter, Sept., p 96

How Allis-Chalmers Saves Money Through Value Analysis, Feb., p 36

Maintenance Materials Control Systems: K. M. Smith, Dec., p 104

Modernization Slashes Costs, Castings Replace Stampings: J. Van Haver, Feb., p 44

More Incentives for Workers – More Profit for Foundries, March, p 42

New Process For Foundry Iron: T. E. Ban, B. W. Worthington and C. D. Thompson, March, p 95

CO_2 PROCESS

Carbon Dioxide Process: G. D. Haley and J. L. Leach, March, p 121

CO_2 Process Improvements: D. A. Taylor, Sept., p 125

CO_2 Techniques Mean New Profits for Small Foundries: F. H. Donnelly, D. Longeuville, July, p 34

CUPOLA

Calcium Carbide Use in Acid Cupolas: R. Schulze, July, p 75

DESIGN

Aircraft-Missile Steel Castings: S. A. McCarthy, Feb., p 110

Cast Metals and Cast Shapes, 1961 Hoyt Memorial Lecture, June, p 73

Engine Castings Development By Experimental Stress Analysis: L. A. Grotto, Dec., p 86

High Strength Aluminum Alloy Airframe Castings: W. A. Bailey and E. N. Bossing, Oct., p 86

Horizon Requirements for Castings: S. R. Carpenter, Sept., p 96

How Allis-Chalmers Saves Money Through Value Analysis, Feb., p 36

Permanent Mold Design: J. Wall, April, p 103

Precision in The Foundry: A. Short, Sept., p 69

Scores Timidity of Designers and Engineers: J. B. Caine, May, p 87

DIE CASTING

Die Cast Zinc Meets Competitive Demands, Aug., p 34

Die and Permanent Mold Casting Aluminum Alloy Minor Elements: D. L. Colwell and R. J. Kissling, Dec., p 60

Maximizing Soundness In Aluminum Die Castings: L. M. Elijah, July, p 96

Melting Practice For Aluminum Die and Permanent Mold Casting, April, p 50

New Growth Slated in 1962 For Die Casters, Dec., p 38

Porosity in Zinc Die Castings: G. P. Lewis, D. A. Craw and R. C. Bell, Nov., p 71

Vacuum Die Casting–A New Evaluation, June, p 56

DIETRICH'S CORNER:

H. F. Dietrich

Engineering Alumni Tells Educational Needs, Feb., p 25

Forgotten! The Third-Shift-Foreman, Jan., p 26

Free Advice That Won't Be Accepted, June, p 36

Heaven Help Men–When Women Invade Foundry, July, p 25

On the Other Hand–Women Have Proven Ability, Aug., p 26

The Shovel – Lesson For the Indispensable Man, May, p 42

What Qualities Do You Want in a Foundry Foreman? March, p 30

Worker Attitude Has Changed Safety, April, p 26

DUCTILE (NODULAR) IRON

As-Cast Cast Iron Graphite: R. W. Heine and T. W. Mueller, Oct., p 103

Desulphurizing Iron Electrolytically, June, p 11

Ductile Iron Graphite Form Classification: C. K. Donoho, July, p 65

Ductile Iron Youngster With A Bright Future, Oct., p 53

Foundrymen Quick to Adopt New Ductile Iron Test, March, p 37

Gazal Process For Desulfurization of Iron, March, p 17

Graphite Formation During Solidification of Cast Iron: C. R. Loper, Jr. and R. W. Heine, Nov., p 117

International Harvester Converts Memphis Foundry to Ductile Iron, Oct., p 57

Magnesium Analysis As Reliability Criterion of Ductile Iron Quality: AFS Ductile Iron Div. Research Committee (12-K), Aug., p 106

New Injection Process Modifies Malleable–Produces Ductile, Dec., p 31

Shell Molding and Ductile Iron–New Profit-Making Team: Arthur Adams and Harold Grant, Nov., p 52

EDITOR'S FORUM:

Jack H. Schaum

Jan., p 150	July, p 134
Feb., p 150	Aug., p 138
Mar., p 150	Sept., p 150
Apr., p 138	Oct., p 154
May, p 146	Nov., p 152
June, p 136	Dec., p 138

EDUCATION

Industry Acceptance Helps Expand T&RI Program, Dec., p 28

FOUNDRY

Air Condition A Foundry?: Leslie Co., Dec., p 44

More Incentives for Workers – More Profit for Foundries, March, p 42

FURAN BINDERS

New Furfural Binders Reduce Core Costs: International Harvester Co., Jan., p 31

New Sand Mix Doubles Core Production: Massena Foundry, March, p 54

FURNACES

Aluminum Furnace Refractories: C. H. Schweinsberg and J. L. Dolph, Aug., p 81

Bronze Alloys Electric Melting and Quality Control: R. V. Barone, T. F. Godfrey and R. A. Rosenberg, March, p 103

Bottom Pour, High Frequency Induction Furnace, March, p 17

Induction Melting and Degassing Installation: O. E. Erickson, Oct., p 127

New Process For Foundry Iron: T. E. Ban, B. W. Worthington and C. D. Thompson, March, p 95

Specialty Melting As A Service Function In A Research Laboratory: W. F. Moore, Oct., p 75

GATING & RISERING

Cast Steel Nonmetallic Macroinclusions Sources and Prevention: R. A. Flinn, W. B. Pierce and L. H. VanVlack, April, p 57

Copper-Base Casting Alloys: R. A. Flinn and H. Kunsmann, April, p 72

Factors Affecting Soundness In Alloys With Long and Short Freezing Range: J. T. Berry and T. Watmough, Jan., p 63

Feeding Distance of Bars In Investment Molds: H. Present and H. Rosenthal, March, p 70

Fin Gating–New Cost-cutting Steel Techniques: T. Finlay, Sept., p 53

How Much Superheat Is Lost In The Runner?: J. W. Hlinka, V. Paschkis and F. S. Puhr, Oct., p 119

Mold Variables Influence On Fluidity of Aluminum: M. C. Flemings, F. R. Mollard and H. F. Taylor, Nov., p 100

New Concept Reduces Casting Cleaning Costs, March, p 51

Permanent Mold Design: J. Wall, April, p 103

Solidification of Steel Castings and Ingots: M. C. Flemings, R. V. Barone, S. Z. Uram and H. F. Taylor, Sept., p 82

GRAY IRON

Bubbling Methane Through Cupola Iron, March, p 17

Calcium Carbide Use In Acid Cupolas: R. Schulze, July, p 75

Carbon Sand Provides On-The-Job Economy: Jack Elliott, Aug., p 31

Chilling Behavior Of A Roll-Type Cast Iron: K. E. Pinnow and W. Lindsay, Jan., p 75

Desulphurizing Iron Electrolytically, June, p 11

Factors Affecting Soundness In Alloys With Long and Short Freezing Range: J. T. Berry and T. Watmough, Jan., p 63

Gazal Process For Desulfurization of Iron, March, p 17

Grain Refinement, Nov., p 60

Graphite Formation During Solidification of Cast Iron: C. R. Loper, Jr. and R. W. Heine, Nov., p 117

Inoculation Influence on Gray Iron Structure at Various Carbon Equivalences: H. D. Merchant, L. I. Toriello, and J. F. Wallace, May, p 109

Instant Power . . . For Standby Emergencies, Jan., p 34

New Furfural Binders Reduce Core Cost, Jan., p 31

Modernization Slashes Costs, Castings Replace Stampings: J. VanHaver, Feb., p 44

New Process For Foundry Iron: T. E. Ban, B. W. Worthington, and C. D. Thompson, March, p 95

Solidification of Gray Iron: H. D. Merchant and J. F. Wallace, June, p 63

GRAY IRON FOUNDERS' SOCIETY

Gray Iron Founders Stress Importance of Research, Dec., p 120

HEAT TREATING

Cast Nickel Containing Aluminum Bronze Properties and Microstructure: E. Belkin, Aug., p 87

Centrifugally Cast Steel Cylinders Rapid Gas Heating Techniques: A. Ayvazian, Aug., p 73

Heavy White Iron Section Casting and Annealing: R. W. Heine, T. W. Mueller and J. W. Widmeyer, April, p 85

How to Grain Refine High Silicon-Aluminum Alloys, Jan., p 38

Malleable Iron Graphitization Kinetics: G. Sandoz, B. F. Brown and W. A. Pennington, Jan., p 93

New Injection Process Modifies Malleable—Produces Ductile, Dec., p 31

Structural Uranium Alloy Melting, Casting and Heat Treating Techniques: G. D. Chandley and D. G. Fleck, Aug., p 56

INTERNATIONAL FOUNDRY CONGRESS

Key Metalcasting Trends As Revealed at Zurich: J. Vanick, Jan., p 46

INVESTMENT CASTING

Casting a Heartbeat: Leo E. Carr, Dec., p 36

Feeding Distances of Bars In Investment Molds: H. Present and H. Rosenthal, March, p 70

Magnesium-Base Alloys Investment Cast Properties: K. Herrick, March, p 111

LET'S LOOK AT . . .

H. E. Green

Another Record Year! June, p 5

A Unique Editorial Team! Jan., p 5

Grass Roots Opinion, July, p 5

Healthy Competition! Not Duplication, Feb., p 5

Innovation! And Leadership, March, p 5

It's Either Up or Down! Aug., p 5

Leadership Service For You, May, p 5

Marketing and Profits, Oct., p 5

Metalcasting Buying Power, Sept., p 5

Must Reading For November, Nov., p 5

1961's Most Important Event . . . And Our May Convention issue, April, p 5

Technology and Marketing – Natural Partners, Dec., p 5

LOOKING AT BUSINESS

Jan., p 7
Feb., p 7
Mar., p 11
Apr., p 9
May, p 7
June, p 7
July, p 7
Aug., p 7
Sept., p 7
Oct., p 6
Nov., p 7
Dec., p 7

MAGNESIUM

Light Alloy Grain Size Control and Supercooling Measurements: V. B. Kurfman, April, p 98

Magnesium Analysis As Reliability Criterion of Ductile Iron Quality: AFS Ductile Iron Div. Research Committee (12-K) Aug., p 106

Magnesium-Base Alloys Investment Cast Properties: K. Herrick, March, p 111

Magnesium - Silver - Didymium - Zirconium Casting Alloy QE22A: D. J. Whitehead, Sept., p 102

Prepare Now for Growing Magnesium Market, June, p 52

MAINTENANCE

How to Cut Downtime on Handling Equipment, Nov., p 58

Maintenance Materials Control Systems: K. M. Smith, Dec., p 104

MALLEABLE FOUNDERS' SOCIETY

Malleable Founders Study New Market Possibilities, Dec., p 121

MALLEABLE IRON

As-Cast Cast Iron Compact Graphite: R. W. Heine and T. W. Mueller, Oct., p 103

Automatic Grinding Saves Time, Men, and Money, Aug., p 40

Calcium Carbide Use in Acid Cupolas: R. Schulze, July, p 75

Graphite Formation During Solidification of Cast Iron: C. R. Loper, Jr. and R. W. Heine, Nov., p 117

Heavy White Iron Section Casting and Annealing: R. W. Heine, T. W. Mueller and J. W. Widmeyer, April, p 85

Malleable Iron Graphitization Kinetics: G. Sandoz, B. F. Brown and W. A. Pennington, Jan., p 93

Malleable Iron – Past, Present, Future, March, p 49

New Applications Spur Malleable Iron Industry, March, p 46

New Growth Slated in 1962 For Die Casters, Dec., p 38

New Injection Process Modifies Malleable—Produces Ductile, Dec., p 31

Shooter, Ceroxide, Cermet or Slag: C. A. Sanders, H. J. Heine and R. F. Marande, July, p 108

MANAGEMENT

Aerospace Industries Demand Integrity in Every Casting, April, p 35

Aerospace Industries . . . Stepping Stone to New Casting Markets, April, p 38

Air Condition A Foundry?: Leslie Co., Dec., p 44

Aircraft—Missile Steel Castings: S. A. McCarthy, Feb., p 110

Bright Future Forecast for Aluminum Castings: J. H. Schaum, Jan., p 48

Casting High Integrity Steel, April, p 40

Cast Metals and Cast Shapes, 1961 Hoyt Memorial Lecture, J. B. Caine, June, p 73

Cost Control Through Process Quality Control: C. E. Haney, Oct., p 110

Creative Sales Engineers Are Key to Today's Profits, June, p 46

Die Cast Zinc Meets Competitive Demands, Aug., p 34

Does Your Foundry Qualify?: J. H. Rizley, Oct., p 45

Ductile Iron—Youngster With a Bright Future, Oct., p 53

Economist Predicts Steady Expansion at Equipment Manufacturers Meeting, Dec., p 118

Establishing Work Standards By Sampling: E. C. Keachie, Dec., p 114

Exhibition-in-Print, May, p 91

Farm Mechanization Growth Expanding Market for Castings, Feb., p 48

Five Point Blueprint for Marketing Success, May, p 49

40 Leading Markets for Metalcasters Today, May, p 52

Foundry Air Pollution Control In The San Francisco Bay Area: B. Linsky and G. Aase, Nov., p 111

Gear for Tough Times Despite Good Business, Dec., p 34

Horizon Requirements For Castings: S. R. Carpenter, Sept., p 96

How Allis-Chalmers Saves Money Through Value Analysis, Feb., p 36

How Castings Carry The Mail, April, p 48

How to Make Sales Today, March, p 11

How to Operate a Successful Suggestion System, Jan., p 44

Industry Acceptance Helps Expand T&RI Program, Dec., p 28

Industry Leaders Predict Business Upturn Ahead, May, p 45

Instant Power . . . For Standby Emergencies, Jan., p 34

Maintenance Materials Control Systems: K. M. Smith, Dec., p 104

Malleable Iron—Past, Present, Future, March, p 49

Marketing and its Profitable Application to the Metalcasting Industry, March, p 150

Mechanization! A New Report!, Sept., p 49

Meeting the Challenge of Controlling Quality: Lawrence S. Krueger, Nov., p 83

Metalcasters Must Sharpen Sales Efforts, Oct., p 141

Modern Castings Trends Survey, July, p 7

Modernization Spurs Rail Comeback, July, p 31

More Incentives for Workers—More Profit for Foundries, March, p 42

New Alloy Strengthens Valve Stems, Sept., p 45

New Applications Spur Malleable Iron Industry, March, p 46

New Growth Slated in 1962 for Die Casters, Dec., p 38

New Injection Process Modifies Malleable—Produces Ductile, Dec., p 31

New Process For Foundry Iron: T. E. Ban, B. W. Worthington and C. D. Thompson, March, p 95

Ordnance—Unlimited Potential for Castings, Nov., p 45

Planning For Capital Investments, Aug., p 42

Precision in the Foundry: A. Short, Sept., p 69

Prepare Now for Growing Magnesium Market, June, p 52

Sales Engineering—Success Story at Superior Steel: J. W. Lane, July, p 38

See Business Pick-Up Early In 1962, Modern Castings Trends Panel Report, Nov., p 50

Selling the Automotive Casting, Sept., p 41

We Must Sell Castings Harder Than Ever Before, June, p 49

What Is Your Safety IQ?, Feb., p 52

Whither? . . . Jobbing Foundries . . . Mechanization . . . Quality Control, June, p 43

You Can Save Money Moving Bulk Materials: R. J. Gildea, Oct., p 49

MARKET OPPORTUNITIES

Aerospace Industries Demand Integrity in Every Casting, April, p 35

Aerospace Industries . . . Stepping Stone to New Castings Markets, April, p 38

Bright Future Forecast For Aluminum Castings, Jan., p 48

Casting a Heartbeat: Leo E. Carr, Dec., p 36

Creative Sales Engineers Are Key to Today's Profits, June, p 46

Die Cast Zinc Meets Competitive Demands, Aug., p 34

Ductile Iron—Youngster With a Bright Future, Oct., p 53

Farm Mechanization Growth Expanding Market for Castings, Feb., p 48

Five Point Blueprint for Marketing Success, May, p 49

40 Leading Markets for Metalcasters Today, May, p 52

Horizon Requirements For Castings: S. R. Carpenter, Sept., p 96

How Castings Carry the Mail, April, p 48

How to Make Sales Today, March, p 11

Malleable Iron—Past, Present, Future, March, p 49

Metalcasters Must Sharpen Sales Efforts, Oct., p 141

Modernization Spurs Rail Comeback, July, p 31

New Alloy Strengthens Valve Stems, Sept., p 45

New Applications Spur Malleable Iron Industry, March, p 46

New Growth Slated in 1962 for Die Casters, Dec., p 38

Ordnance—Unlimited Potential for Castings, Nov., p 45

Prepare Now for Growing Magnesium Market, June, p 52

See Business Pick-Up Early in 1962, Modern Castings Trends Panel Report, Nov., p 50

Selling the Automotive Casting, Sept., p 41

We Must Sell Castings Harder Than Ever Before, June, p 49

MATERIAL HANDLING

Delivering Sand by Trucks Brings Multiple Savings, Aug., p 38

Electronic Scales Weigh Cupola Charge, Dec., p 48

How To Cut Downtime on Handling Equipment, Nov., p 58

Portable Hoppers Slash Core Room Costs 15%: W. D. Dunn, July, p 37

Unitize and Palletize to Cut Materials Handling Costs: J. H. Bates, July, p 42

You Can Save Money Moving Bulk Materials: R. J. Gildea, Oct., p 48

MECHANIZATION

Automatic Grinding Saves Time, Men, and Money, Aug., p 40

Mechanization! A New Report, Sept., p 48

Modernization Slashes Costs, Castings Replace Stampings: J. VanHaver, Feb., p 44

Whither? . . . Jobbing Foundries . . . Mechanization . . . Quality Control, June, p 43

METALCASTING & WASHINGTON

W. R. Fingal

Sept., p 11
Oct., p 9
Nov., p 15
Dec., p 11

MELTING PRACTICES

Aluminum Bronze Hard Spots: Norman A. Birch, Sept., p 117

Bronze Alloys Electric Melting and Quality Control: R. V. Barone, T. F. Godfrey and R. A. Rosenberg, March, p 103

Bubbling Methane Through Cupola Iron, March, p 17

Calcium Carbide Use in Acid Cupolas: R. Schulze, July, p 75

Chilling Behavior of A Roll-Type Cast Iron: K. E. Pinnow and R. W. Lindsay, Jan., p 75

Desulphurizing Carbon Steel to Extra-Low Limits: A. J. Kiesler, July, p 46

Desulphurizing Iron Electrolytically, June, p 11

Gazal Process for Desulfurization of Iron, March, p 17

Heavy White Iron Section Casting and Annealing: R. W. Heine, T. W. Mueller and J. W. Widmeyer, April, p 85

How to Grain Refine High Silicon Aluminum Alloys, Jan., p 38

Hypereutectic Aluminum—Silicon Casting Alloys Phosphorus Refinement: F. L. Arnold and J. S. Prestley, March, p 61

Induction Melting and Degassing Installation: O. E. Erickson, Oct., p 127

Initial Bubble Test for Determination of Hydrogen Content in Molten Aluminum: D. J. Neil and A. C. Burr, June, p 86

Inoculation Influence on Gray Iron Structure at Various Carbon Equivalences: H. D. Merchant, L. I. Toriello and J. F. Wallace, May, p 109

Melting Practice For Aluminum Die and Permanent Mold Casting, April, p 50

New Injection Process Modifies Malleable—Produces Ductile, Dec., p 31

New Process For Foundry Iron: T. E. Ban, B. W. Worthington and C. D. Thompson, March, p 95

Rapid Desulfurization To 0.002 Per Cent Sulfur: E. J. Dunn, Jr., June, p 90

Shooter, Ceroxide, Cermet or Slag: C. A. Sanders, H. J. Heine and R. F. Marande, July, p 108

Specialty Melting As A Service Function In A Research Laboratory: W. F. Moore, Oct., p 75

Structural Uranium Alloy Melting, Casting and Heat Treating Techniques: G. D. Chandley and D. G. Fleck, Aug., p 56

MOLDS & MOLDING

Calcined Fluid Coke As New Molding Medium: E. G. Gentry and C. L. Lear, July, p 88

Carbon Sand Provides On-The-Job Economy: Jack Elliott, Aug., p 31

Cast Steel Bells Ring True, Sept., p 50

CO_2 Techniques Mean New Profits for Small Foundries: F. H. Donnelly, D. Longeuville, July, p 34

Factors Affecting Metal—Mold Reactions: G. A. Colligan, L. H. VanVlack and R. A. Flinn, Jan., p 104

First Success With Cast Uranium: G. D. Chandley, D. G. Fleck and B. W. Crocker, Watertown Arsenal, Oct., p 41

Green Sand Properties: A. B. Draper and H. A. Knappenberger, Aug., p 49

Jolt Impact Test for Molding Sand Toughness: H. W. Dietert and T. E. Barlow, June, p 80

Lightweight Cellular Metal: L. Polonsky, S. Lipson and H. Markus, Feb., p 57

Modernization Slashes Costs, Castings Replace Stampings: J. VanHaver, Feb., p 44

Mold Materials Thermal Properties: M. R. Seshadri and A. Ramachandran, Dec., p 66

Mold Variables Influence On Fluidity of Aluminum: M. C. Flemings, F. R. Mollard and H. F. Taylor, Nov., p 100

New Sand Practices Produce Five-Way Profits, Feb., p 33

Olivine Wins Scandinavian Approval: Prof. G. S. Schaller, Sept., p 56

Steel Foundry Sand Clay Bonding: J. B. Caine, E. H. King and J. S. Schumacher, Jan., p 111

Super High Strength Molding, March, p 18

Systematic Approach To Sand Design and Control: A. H. Zrimsek and G. J. Vingas, Jan., p 85

NODULAR IRON

(See Ductile Iron)

NON DESTRUCTIVE TESTING

(Including Stress Analysis)

Cast Nuclear Components Radiography by Means of Kilocurie Cobalt Sources: Richard Lent, Oct., p 118

Engine Castings Developments By Experimental Stress Analysis: L. A. Grotto, Dec., p 86

Measuring Wall Thickness Is No Problem, Dec., p 41

PATTERNS & CORE BOXES

Aluminum Pattern Castings: W. E. Sicha, Oct., p 71

Core Production in Hot Core Boxes: P. Jasson, July, p 55

Hot Core Box Design and Engineering: E. E. Harkess, Feb., p 115

Low Melting Alloys For Pattern Shop Use: O. J. Seeds, Aug., p 65

Machined Patterns Can Be Competitive: Ray Olson, March, p 89

New Furfural Binders Reduce Core Cost, Jan., p 31

New Sand Mix Doubles Core Production, March, p 54

Plastic Inserts Reduce Core Box Wear, Buick Motor Div., Oct., p 50

Plastic Patternmaking—The Polyurethane Concept: H. A. Burton, July, p 72

PERMANENT MOLD CASTING

Aluminum Alloy 356+ Be Permanent Mold Casting: A. J. Iler, Aug., p 98

Aluminum-Uranium Alloy Centrifugal Casting: N. E. Daniel, E. L. Foster and R. F. Dickerson, Jan., p 53

"Cloud Nine"—Permanent Mold Casting of Steel, Feb., p 40

Die and Permanent Mold Casting Aluminum Alloy Minor Elements: D. L. Colwell and R. J. Kissling, Dec., p 60

Instant Power . . . For Standby Emergencies, Jan., p 34

Melting Practice For Aluminum Die and Permanent Mold Casting, April, p 50

Permanent Mold Design: J. Wall, April, p 103

Tilt Pouring Permanent Mold Aluminum Castings: G. W. Stahl, Oct., p 68

PLANT DESCRIPTION

International Harvester Converts Memphis Foundry to Ductile Iron, Oct., p 56

New Process For Foundry Iron: T. E. Ban, B. W. Worthington and C. D. Thompson, March, p 95

Modernization Slashes Costs, Castings Replace Stampings: J. VanHaver, Feb., p 44

QUALITY CONTROL

Aluminum Bronze Hard Spots: Norman A. Birch, Sept., p 117

Bronze Alloys Electric Melting and Quality Control: R. V. Barone, T. F. Godfrey and R. A. Rosenberg, March, p 103

Cast Nuclear Components Radiography By Means Of Kilocurie Cobalt Sources: Richard Lent, Oct., p 118

Cast Steel Nonmetallic Macroinclusions Sources and Prevention: R. A. Flinn, W. B. Pierce and L. H. VanVlack, April, p 57

Clay Test Proves New Control Tool, April, p 46

Cost Control Through Process Quality Control: C. E. Haney, Oct., p 110

CO_2 Process Improvements: D. A. Taylor, Sept., p 125

Die and Permanent Mold Casting Aluminum Alloy Minor Elements: D. L. Colwell, and R. J. Kissling, Dec., p 60

Ductile Iron Graphite Form Classification: C. K. Donoho, July, p 65

Factors Affecting Metal—Mold Reactions: G. A. Colligan, L. H. VanVlack and R. A. Flinn, Jan., p 104

Foundrymen Quick to Adopt New Ductile Iron Test, March, p 37

Initial Bubble Test for Determination of Hydrogen Content in Molten Aluminum: D. J. Neil and A. C. Burr, June, p 86

Jolt Impact Test for Molding Sand Toughness: H. W. Dietert and T. E. Barlow, June, p 80

Ladle Refractory Performance Improvement Test Program: P. J. Neff, J. J. Downs and J. T. Baker, Dec., p 96

Light Alloy Grain Size Control and Supercooling Measurements: V. B. Kurfman, April, p 98

Magnesium Analysis As Reliability Criterion of Ductile Iron Quality: AFS Ductile Iron Div. Research Committee (12-K), Aug., p 106

Maximizing Soundness In Aluminum Die Castings: L. M. Elijah, July, p 96

Measuring Wall Thickness Is No Problem, Dec., p 41

Meeting the Challenge of Controlling Quality: Lawrence S. Krueger, Nov., p 83

Porosity in Zinc Die Castings: G. P. Lewis, D. A. Craw and R. C. Bell, Nov., p 71

Precision In The Foundry: A. Short, Sept., p 69

Refractories As Sources Of Macroinclusions: L. H. VanVlack, J. E. Brokloff and R. A. Flinn, April, p 62

Sampling of Sand: AFS Grading, Fineness and Distribution Committee (8-F) Report, July, p 49

Shooter, Ceroxide, Cermet or Slag: C. A. Sanders, H. J. Heine and R. F. Marande, July, p 108

Systematic Approach to Sand Design and Control, A. H. Zrimsek and G. J. Vingas, April, p 93

Whither? . . . Jobbing Foundries . . . Mechanization . . . Quality Control, June, p 43

REFRACTORIES

Aluminum Furnace Refractories: C. H. Schweinsberg and J. L. Dolph, Aug., p 81

Cast Steel Nonmetallic Macroinclusions Sources and Prevention: R. A. Flinn, W. B. Pierce and L. H. VanVlack, April, p 57

Ladle Refractory Performance Improvement Test Program: P. J. Neff, J. J. Downs and J. T. Baker, Dec., p 96

Refractories As Sources Of Macroinclusions: L. H. VanVlack, J. E. Brokloff and R. A. Flinn, April, p 62

Shooter, Ceroxide, Cermet or Slag: C. A. Sanders, H. J. Heine and R. F. Marande, July, p 108

SAFETY

Take Five Minutes to Think!, Aug., p 46

What Is Your Safety IQ?, Feb., p 52

SAFETY-HYGIENE-AIR POLLUTION

H. J. Weber

Air Pollution Syndrone—A Popular Misconception, Sept., p 31

Freckles Always Got The Blame, Jan., p 23

Good Questions Keep SH&AP Office Busy, July, p 27

Hot Men Break Down in Hot Surroundings, Aug., p 23

Human Nature—Biggest Block In Selling Safety, June, p 29

If It Moves, Salute It! If You Can't Pick It Up, Paint It!, Oct., p 29

Leaded Steel—Does It Cause Lead Poisoning?, April, p 29

Serendipity—Big Works Paying Extra Dividends, May, p 40

Take Chance Out of Safety, Feb., p 21

They All Had Their Ace In The Hole, Nov., p 43

They Always Said "OH"!, March, p 35

Three Explosions—Three Dead, Dec., p 25

SALES

A Five-point Blueprint for Marketing Success, May, p 49

Creative Sales Engineers Are Key to Today's Profits, June, p 46

Die Cast Zinc Meets Competitive Demands, Aug., p 34

Ductile Iron—Youngster With a Bright Future, Oct., p 53

Gear for Tough Times Despite Good Business, Dec., p 34

Industry Leaders Predict Business Upturn Ahead, May, p 45

Metalcasters Must Sharpen Sales Efforts, Oct., p 141

Modern Castings Trends Survey, July, p 7

Modernization Spurs Rail Comeback, July, p 31

New Growth Slated in 1962 for Die Casters, Dec., p 38

Ordnance—Unlimited Potential for Castings, Nov., p 45

Prepare Now for Growing Magnesium Market, June, p 52

Sales Engineering—Success Story at Superior Steel: J. W. Lane, July, p 38

See Business Pick-Up Early in 1962, Modern Castings Trends Panel Report, Nov., p 50

Selling the Automotive Casting, Sept., p 41

We Must Sell Castings Harder Than Ever Before, June, p 49

SAND & ADDITIVES

Calcined Fluid Coke As New Molding Medium: E. G. Gentry and C. L. Lear, July p 88

Carbon Dioxide Process: G. D. Haley and J. L. Leach, March, p 121

Clay Test Proves New Control Tool, April, p 46

Core Production in Hot Core Boxes: P. Jasson, July, p 55

CO_2 Process Improvements: D. A. Taylor, Sept., p 125

Delivering Sand by Truck Brings Multiple Savings, Aug., p 38

Factors Affecting Metal–Mold Reactions: G. A. Colligan, L. H. VanVlack and R. A. Flinn, Jan., p 104

Green Sand Properties, Median Grain Size Effect: A. B. Draper and H. A. Knappenberger, Aug., p 49

Granular Movement During Squeezing: D. C. Williams, Jan., p 60

Jolt Impact Test for Molding Sand Toughness: H. W. Dietert and T. E. Barlow, June, p 80

Molding And Core Sand High Temperature Strength Testing: R. W. Heine, J. S. Schumacher and E. H. King, Oct., p 96

Mold Materials Thermal Properties: M. R. Seshadri and A. Ramachandran, Dec., p 66

New Furfural Binders Reduce Core Cost, Jan., p 31

New Sand Mix Doubles Core Production, March, p 54

New Sand Practices Produce Five-Way Profits, Feb., p 33

Olivine Wins Scandinavian Approval: Prof. G. S. Schaller, Sept., p 56

Portable Hoppers Slash Core Room Costs 15%: W. D. Dunn, July, p 37

Sampling of Sand: AFS Grading, and Distribution Committee (8-F) Report, July, p 49

Steel Foundry Sand Clay Bonding, J. B. Caine, E. H. King, and J. S. Schumacher, Jan., p 111

Systematic Approach to Sand Design and Control: G. J. Vingas and A. H. Zrimsek, Feb., p 93

Systematic Approach to Sand Design and Control: A. H. Zrimsek and G. J. Vingas, Jan., p 85

Systematic Approach to Sand Design and Control, Report 4, Wood Flour: A. H. Zrimsek and G. J. Vingas, March, p 73

Systematic Approach to Sand Design and Control: A. H. Zrimsek and G. J. Vingas, April, p 93

SHELL MOLDING, BLOWING & CASTING

Bronze Valve Vertical Gating In Shell Molds: F. E. Murphy, G. J. Jackson and R. A. Rosenberg, July, p 81

Dust and Vapor Control For Shell Molding Operations: Elijah B. Henby, Oct., p 65

Factors Affecting Metal–Mold Reactions: G. A. Colligan, L. H. VanVlack and R. A. Flinn, Jan., p 104

Shell Molding and Ductile Iron—New Profit-Making Team: Arthur Adams and Harold Grant, Nov., p 52

SOLIDIFICATION STUDIES

Chilling Behavior Of A Roll-Type Cast Iron: K. E. Pinnow and R. W. Lindsay, Jan., p 75

Copper-Base Casting Alloys: R. A. Flinn and H. Kunsmann, April, p 72

Factors Affecting Soundness In Alloys With Long And Short Freezing Range: J. T. Berry and T. Watmough, Jan., p 63

Factors Affecting Metal–Mold Reactions: G. A. Colligan, L. H. VanVlack and R. A. Flinn, Jan., p 104

Feeding Distance of Bars In Investment Molds: H. Present and H. Rosenthal, March, p 70

Fluidity of Aluminum Alloys: M. C. Flemings, E. Niijama and H. F. Taylor, Dec., p 75

Grain Refinement, Nov., p 60

Graphite Formation During Solidification of Cast Iron: C. R. Loper, Jr. and R. W. Heine, Nov., p 117

How Much Superheat Is Lost In The Runner: J. W. Hlinka, V. Paschkis and F. S. Puhr, Oct., p 119

Inoculation Influence of Gray Iron Structure at Various Carbon Equivalences: H. D. Merchant, L. I. Toriello and J. F. Wallace, May, p 109

Malleable Iron Graphitization Kinetics: G. Sandoz, B. F. Brown and W. A. Pennington, Jan., p 93

Mold Materials Thermal Properties: M. R. Seshadri and A. Ramachandran, Dec., p 66

Porosity in Zinc Die Casting: G. P. Lewis, D. A. Craw and R. C. Bell, Nov., p 71

Solidification of Gray Iron: H. D. Merchant and J. F. Wallace, June, p 63

Solidification of Steel Castings and Ingots: M. C. Flemings, R. V. Barone, S. Z. Uram and H. F. Taylor, Sept., p 82

STEEL

Aircraft–Missile Steel Castings: S. A. McCarthy, Feb., p 110

Bottom Pour, High Frequency, Induction Furnace, March, p 17

Casting a Shaft For The "Big Ear," March, p 40

Casting High Integrity Steel, April, p 40

Cast Nuclear Components Radiography By Means Of Kilocurie Cobalt Sources: Richard Lent, Oct., p 118

Cast Steel Bells Ring True, Sept., p 50

Cast Steel Nonmetallic Macroinclusions Sources and Prevention: R. A. Flinn, W. B. Pierce and L. H. VanVlack, April, p 57

Centrifugally Cast Steel Cylinders Rapid Gas Heating Techniques: A. Ayvazian, Aug., p 73

"Cloud Nine"—Permanent Mold Casting of Steel, Feb., p 40

Desulphurizing Carbon Steel to Extra-Low Limits: A. J. Kiesler, July, p 46

Factors Affecting Soundness In Alloys With Long and Short Freezing Range; J. T. Berry and T. Watmough, Jan., p 63

Feeding Distance of Bars In Investment Molds: H. Present and H. Rosenthal, March, p 70

Fin Gating—New Cost-cutting Steel Technique: T. Finlay, Sept., p 53

Grain Refinement, Nov., p 60

High Strength Structural Steel Castings for Aerospace Applications: W. R. Roser, Aug., p 109

Induction Melting and Degassing Installation: O. E. Erickson, Oct., p 127

Ladle Refractory Performance Improvement Test Program: P. J. Neff, J. J. Downs and J. T. Baker, Dec., p 96

Meeting the Challenge of Controlling Quality: Lawrence S. Krueger, Nov., p 83

New Concept Reduces Casting Cleaning Costs, March, p 51

New Sand Practices Produce Five-Way Profits, Feb., p 33

Olivine Wins Scandinavian Approval: Prof. G. S. Schaller, Sept., p 56

Rapid Desulfurization to 0.002 Per Cent Sulfur: E. J. Dunn, Jr., June, p 90

Refractories As Sources Of Macroinclusions: L. H. VanVlack, J. E. Brokloff and R. A. Flinn, April, p 62

Solidification of Steel Castings and Ingots: M. C. Flemings, R. V. Barone, S. Z. Uram and H. F. Taylor, Sept., p 82

Steel Foundry Sand Clay Bonding: J. B. Caine, E. H. King and J. S. Schumacher, Jan., p 111

TESTING

Bronze Alloys Electric Melting and Quality Control: R. V. Barone, T. F. Godfrey and R. A. Rosenberg, March, p 103

Carbon Diozide Process: G. D. Haley and J. L. Leach, March, p 121

Clay Test Proves New Control Tool, April, p 46

Die and Permanent Mold Casting Aluminum Alloy Minor Elements: D. L. Colwell and R. J. Kissling, Dec., p 60

Evaluating Cleaning Room Materials, Nov., p 56

Engine Castings Development By Experimental Stress Analysis: L. A. Grotto, Dec., p 86

Foundrymen Quick to Adopt New Ductile Iron Test, March, p 37

Green Sand Properties: A. B. Draper and H. A. Knappenberger, Aug., p 49

Initial Bubble Test for Determination of Hydrogen Content in Molten Aluminum: D. J. Neil and C. Burr, June, p 86

Jolt Impact Test for Molding Sand Toughness: H. W. Dietert and T. E. Barlow, June, p 80

Light Alloy Grain Size Control and Supercooling Measurements: V. B. Kurfman, April, p 98

Magnesium Analysis As Reliability Criterion of Ductile Iron Quality: AFS Ductile Iron Div. Research Committee (12-K), Aug., p 106

Molding and Core Sand High Temperature Strength Testing: R. W. Heine, J. S. Schumacher and E. H. King, Oct., p 96

Sampling of Sand: AFS Grading, Fineness and Distribution Committee (8-F) Report, July, p 49

Systematic Approach To Sand Design and Control: A. H. Zrimsek and G. J. Vingas, Jan., p 85

Systematic Approach To Sand Design and Control: G. J. Vingas and A. H. Zrimsek, Feb., p 93

Systematic Approach To Sand Design and Control, Progress Report 4—Wood Flour: A. H. Zrimsek and G. J. Vingas, March, p 73

Systematic Approach To Sand Design and Control: A. H. Zrimsek and G. J. Vingas, April, p 93

TRENDS IN EDUCATION

R. E. Betterley

Apprentice Program Pays Off at Howard Foundry, Dec., p 22

Cast Metals' Vital Role In Industrial Arts, July, p 28

Communications . . . An Industrial Headache, Feb., p 23

Communications . . . An Industrial Headache, March, p 32

Communications . . . An Industrial Headache, April, p 30

Communications . . . An Industrial Headache, May, p 33

Help Promote Metalcasting In School Programs, Aug., p 20

Judging Apprentice Contest Is A Big Job, June, p 32

Management for Creativity, Nov., p 32

The Hole In The Roof, Jan., p 25

You CAN Teach An Old Dog New Tricks, Sept., p 32

What Next For Apprenticeship Training in Metalcasting?, Oct. p 30

URANIUM

First Success With Cast Uranium, Oct., p 41

Structural Uranium Alloy Melting, Casting and Heat Treating Techniques: G. D. Chandley and D. G. Fleck, Aug., p 56

ZINC

Die Cast Zinc Meets Competitive Demands: Jack H. Schaum, Aug., p 34

New Growth Slated in 1962 for Die Casters, Dec., p 38

Porosity in Zinc Die Castings: G. P. Lewis, D. A. Craw and R. C. Bell, Nov., p 71

Vacuum Die Casting—A New Evaluation, June, p 56

MISCELLANEOUS

A

Accurate Time From A Cast Sun Dial, Apr., p 45

Air Condition A Foundry?: Leslie Co., Dec., p 44

Aircraft—Missile Steel Castings: S. A. McCarthy, Feb., p 110

Allis Chalmers Mfg. Co.: How Allis-Chalmers Saves Money Through Value Analysis, Feb., p 36

Allis-Chalmers Mfg. Co.: Unitize and Palletize to Cut Materials Handling Costs: J. H. Bates, July, p 42

American Brake Shoe Co.: Casting High Integrity Steel, Apr., p 40

American Cast Iron Pipe Co.: Measuring Wall Thickness Is No Problem, Dec., p 41

American Hoist & Derrick Co.: New Concept Reduces Casting Cleaning Costs, March, p 51

As-Cast Cast Iron Compact Graphite: R. W. Heine and T. W. Mueller, Oct., p 103

Automatic Grinding Saves Time, Men and Money: John W. Lane, Aug., p 40

B

Bright Future Forecast for Aluminum Castings: J. H. Schaum, Jan. p 48

Bronze Alloys Electric Melting and Quality Control: R. V. Barone, T. F. Godfrey and R. A. Rosenberg, March, p 103

Bronze Vertical Gating in Shell Molds: R. A. Rosenberg, F. E. Murphy and G. J. Jackson, July, p 81

Buick Motor Division: Plastic Inserts Reduce Corebox Wear, Oct., p 50

C

Calcined Fluid Coke As New Molding Medium: E. G. Gentry and C. L. Lear, July, p 88

Calcium Carbide Use In Acid Cupolas: R. Schulze, July, p 75

Canadian Steel Foundries, Ltd: Fin Gating—New Cost-Cutting Steel Technique: T. Finlay, Sept. p 53

Carbon Dioxide Process: G. D. Haley and J. L. Leach, March, p 121

Carbon Sand Provides On-The-Job Economy: Jack Elliott, Aug., p 31

Cast Metals and Cast Shapes: J. B. Caine, June, p 73

Cast Nickel Containing Aluminum Bronze Properties and Microstructure: E. Belkin, Aug., p 87

Cast Nuclear Components Radiography by Means of Kilocurie Cobalt Sources: Richard Lent, Oct., p 118

Cast Steel Bells Ring True, Sept., p 50

Cast Steel Nonmetallic Macro-inclusions Sources and Prevention: R. A. Flinn, W. B. Pierce and L. H. VanVlack, April, p 57

Chilling Behavior Of A Roll-Type Cast Iron: K. E. Pinnow and R. W. Lindsay, Jan., p 75

Clay Test Proves New Control Tool, Apr., p 47

"Cloud Nine"—Permanent Mold Casting of Steel, Feb., p 40

Cobo Hall Passes All Exhibitor Tests, AFS-Sponsored Rules Provide Assist, Dec., p 116

Core Production in Hot Core Boxes: Phillippe Jasson, July, p 55

Cost Control Through Process Quality Control: C. E. Haney, Oct., p 110

Czechoslovakia, CO_2 Process: Dr. Petrzela, Jan., p 12

D

Delivering Sand by Truck Brings Multiple Savings: Leo Marinelli, Aug., p 38

Desulphurizing Carbon Steel To Extra-Low Limits: A. J. Kiesler, July, p 46

Die Cast Zinc Meets Competitive Demands, Aug., p 34

Does Your Foundry Qualify?: J. H. Rizley, Oct., p 45

Dust and Vapor Control For Shell Molding Operations: Elijah B. Henby, Oct., p 65

E

Economist Predicts Steady Expansion at Equipment Manufacturers Meeting, Dec., p 118

Engine Castings Development By Experimental Stress Analysis: L. A. Grotto, Dec., p 86

Esco Corporation: How To Operate A Successful Suggestion System, Jan., p 44

Establishing Work Standards By Sampling: E. C. Keachie, Dec., p 114

Evaluating Cleaning Room Materials, Nov., p 56

Experimental Procedure To Determine Grain Refinement, Jan., p 42

F

Factors Affecting Metal-Mold Reactions: G. A. Colligan, L. H. VanVlack and R. A. Flinn, Jan., p 104

Factors Affecting Soundness In Alloys With Long and Short Freezing Range: J. T. Berry and T. Watmough, Jan., p 63

Fairbanks Morse & Co.: Instant Power

. . . For Standby Emergencies, Jan., p 34

Farm Mechanization Growth Expanding Market for Castings: Feb., p 48

Feeding Distance of Bars In Investment Molds: H. Present and H. Rosenthal, March, p 70

Fin Gating—New Cost-Cutting Steel Technique: T. Finlay, Sept., p 53

First Success With Cast Uranium: G. D. Chandley, D. G. Fleck and B. W. Crocker, Watertown Arsenal, Oct., p 41

Five Point Blueprint for Marketing Success, May, p 49

Fluidity of Aluminum Alloys: M. C. Flemings, E. Niijama and H. F. Taylor, Dec., p 75

Ford Motor Co.: Shell Molding and Ductile Iron—New Profit-Making Team: Arthur A. Adams and Harold Grant, Nov., p 52

40 Leading Markets For Metalcasters Today, May, p 52

Foundry Air Pollution Control In The San Francisco Bay Area: B. Linsky and G. Aase, Nov., p 111

Foundrymen Quick To Adopt New Ductile Iron Test, March, p 37

G

General Electric Co.: Desulphurizing Carbon Steel To Extra-Low Limits: A. J. Kiesler, July, p 46

General Steel Castings Corp.: Casting a Shaft For The "Big Ear," March, p 40

Grain Refinement, Nov., p 60

Granular Movement During Squeezing: D. C. Williams, Jan., p 60

Graphite Formation During Solidification of Cast Iron: C. R. Loper, Jr. and R. W. Heine, Nov., p 117

Green Sand Properties: A. B. Draper and H. A. Knappenberger, Aug., p 49

H

Heavy White Iron Section Casting and Annealing: R. W. Heine, T. W. Mueller and J. W. Widmeyer, April, p 85

High Strength Aluminum Alloy Airframe Castings: W. A. Bailey and E. N. Bossing, Oct., p 86

High Strength Aluminum Casting Alloy M517-T61: W. A. Bailey, E. N. Bossing and F. H. Roebuck, Dec., p 110

High Strength Structural Steel Castings for Aerospace Applications: W. R. Roser, Aug., p 109

High Strength Yellow Brass Castings Weld Repair: Donald K. Fox, Oct., p 89

Horizon Requirements For Castings: S. R. Carpenter, Sept., p 96

Hot Core Box Design and Engineering: E. E. Harkess, Feb., p 115

How Allis-Chalmers Saves Money Through Value Analysis: J. H. Snartemo, Feb., p 36

How Much Superheat Is Lost In the Runner: J. W. Hlinka, V. Paschkis and F. S. Puhr, Oct., p 119

How To Cut Downtime on Handling Equipment: John M. Squier, Nov., p 58

How To Grain Refine High Silicon-Aluminum Alloys, Jan., p 38

How To Operate A Successful Suggestion System, Jan., p 44

Hoyt Memorial Lecture—1961, Cast Metals and Cast Shapes: J. B. Caine, June, p 73

Hypereutectic Aluminum-Silicon Casting Alloys Phosphorus Refinement: F. L. Arnold and J. S. Prestley, March, p 61

I

Initial Bubble Test For Determination of Hydrogen Content In Molten Aluminum: D. J. Neil and A. C. Burr, June, p 86

Instant Power For Standby Emergencies, Jan., p 34

Inoculation Influence on Gray Iron Structure at Various Carbon Equivalences: H. D. Merchant, L. I. Toriello and J. F. Wallace, May, p 109

International Harvester Converts Memphis Foundry to Ductile Iron, Oct., p 56

International Harvester Milwaukee Works: New Furfural Binders Reduce Core Cost, Jan., p 37

Italy, Calamari Induction Furnace, Jan., p 11

J

James Foundry: Automatic Grinding Saves Time, Men, and Money, Aug., p 40

Jamestown Malleable: New Injection Process Modifies Malleable—Produces Ductile, Dec., p 31

Jolt Impact Test For Molding Sand Toughness: H. W. Dietert and T. E. Barlow, June, p 80

K

Kennedy Valve Mfg. Co.: New Alloy Strengthens Valve Stems, Sept., p 45

Kensington Steel Co.: New Sand Practices Produce Five-Way Profits, Feb., p 33

Key Metalcasting Trends As Revealed at Zurich: J. Vanick, Jan., p 46

L

Ladle Refractory Performance Improvement Test Program: P. J. Neff, J. J. Downs and J. T. Baker, Dec., p 96

Leslie Co.: Air Condition A Foundry?, Dec., p 44

Light Alloy Grain Size Control and Supercooling Measurements: V. B. Kurfman, April, p 98

Lightweight Cellular Metal: L. Polonsky, S. Lipson and H. Markus, Feb., p 57

Low Melting Alloys For Pattern Shop Use: O. J. Seeds, Aug., p 65

M

Machined Patterns Can Be Competitive: Ray Olson, March, p 89

Manistee Iron Works: Carbon Sand Provides On-The-Job Economy, Aug., p 31

Massena Foundry of General Motors: New Sand Mix Doubles Core Production, March, p 54

Maximizing Soundness In Aluminum Die Castings: L. M. Elijah, July, p 96

Mechanization! A New Report, Sept., p 49

Meeting The Challenge Of Controlling Quality: Lawrence S. Krueger, Nov., p 83

Modernization Slashes Cost, Castings Replace Stampings: John Van Haver, Feb., p 44

Modernization Spurs Rail Comeback, July, p 31

Mold Casting of Steel, Feb., p 40

More Incentives for Workers—More Profit for Foundries: John R. Walley, March, p 42

N

New Alloy Strengthens Valve Stems: Kennedy Valve Mfg. Co., Sept., p 45

New Applications Spur Malleable Iron Industry, March, p 46

New Concept Reduces Casting Cleaning Costs: Elmer Kreger, March, p 51

New Furfural Binders Reduce Core Cost, Jan., p 31

New High Strength Dezincification Resistant Bronze Casting Alloy: A. H. Hesse, Dec., p 51

New Injection Process Modifies Malleable—Produces Ductile, Dec., p 31

New Process For Foundry Iron: T. E. Ban, B. W. Worthington and C. D. Thompson, March, p 95

New Sand Mix Doubles Core Production, Feb., p 54

New Sand Practices Produce Five-Way Profits: W. D. McMillan, Feb., p 33

Norton Co.: Accurate Time From A Cast Sun Dial, April, p 45

O

Oberdorfer Foundries, Inc.: Portable Hoppers Slash Core Room Costs 15%, July, p 37

Olivine Wins Scandinavian Approval: G. S. Schaller, Sept., p 56

105 Top Technological "Breakthroughs" for 1961, May, p 69

Ordnance—Unlimited Potential For Castings: J. H. Schaum, Nov., p 45

P

Pelton Steel Casting Co.: Meeting The Challenge Of Controlling Quality: L. S. Krueger, Nov., p 83

Pittsburgh Brass Mfg. Co.: CO_2 Techniques Mean New Profits For Small Foundries: F. H. Donnelly and D. Longeuville, July, p 34

Planning for Capital Investments, Aug., p 42

Plastic Inserts Reduce Corebox Wear, Oct., p 50

Plastic Patternmaking: Henry A. Burton, July, p 72

Porosity In Zinc Die Castings: G. P. Lewis, D. A. Craw and R. C. Bell, Nov., p 71

Portable Hoppers Slash Core Room Costs 15%, July, p 37

Precision In The Foundry: A. Short, Sept., p 69

Precision Metalsmiths, Inc.: Casting A Heartbeat, Dec., p 36

R

Rapid Desulfurization to 0.002 Per Cent Sulfur: E. J. Dunn, June, p 90

Renault Foundry Laboratory: Core Production In Hot Core Boxes: P. Jasson, July, p 55

Rolls Royce, Ltd.: Aero Engines Div. Precision In The Foundry, Sept., p 69

Russia, Soviet Industry Automation, Jan., p 12

S

Sampling of Sand: AFS Grading, Fineness and Distribution Committee Report (8-F), July, p 49

Scrap Castings Can Be Valuable, Jan., p 150

Sealed Power Corp.: Modernization Slashes Costs, Castings Replace Stampings: J. Van Haver, Feb., p 44

Selling The Automotive Casting, Sept., p 41

Shooter, Ceroxide, Cermet or Slag: C. A. Sanders, H. J. Heine and R. F. Marande, July, p 108

Solidification of Gray Iron: H. D. Merchant and J. F. Wallace, June, p 63

Specialty Melting As A Service Function In A Research Laboratory: W. F. Moore, Oct., p 75

Structural Uranium Alloy Melting, Casting and Heat Treating Techniques: G. D. Chandley and D. G. Fleck, Aug., p 56

Superior Steel Castings Co.: Sales Engineering – Success Story at Superior Steel, July, p 38

Suppliers' Directory of Modern Castings Advertisers 1961, May, p 139

Systematic Approach To Sand Design and Control: A. H. Zrimsek and G. J. Vingas, Jan., p 85

Systematic Approach To Sand Design and Control: G. J. Vingas and A. H. Zrimsek, Feb., p 93

Systematic Approach To Sand Design and Control, Progress Report 4–Wood Flour: A. H. Zrimsek and G. J. Vingas, March, p 73

Systematic Approach To Sand Design and Control: A. H. Zrimsek and G. J. Vingas, April, p 93

T

Tilt Pouring Permanent Mold Aluminum Castings: G. W. Stahl, Oct., p 68

U

Unitize and Palletize To Cut Material Handling Costs: John H. Bates, July, p 42

W

Walworth Co.: Bronze Alloys Electric Melting and Quality Control: R. V. Barone, T. F. Godfrey and R. A. Rosenberg, March, p 103

Walworth Co.: Bronze Valve Vertical Gating in Shell Molds: F. E. Murphy, G. J. Jackson and R. A. Rosenberg, July, p 81

Watertown Arsenal: First Success With Cast Uranium, Oct., p 41

Weldable As-Cast Nickel Aluminum Bronze Composition and Microstructure: M. L. Foster and S. Goldspiel, Feb., p 72

Y

You Can Save Money Moving Bulk Materials: R. J. Gildea, Oct., p 48

AUTHORS

A

Aase, G. and B. Linsky: Foundry Air Pollution Control In The San Francisco Bay Area, Nov., p 111

Adams, Arthur A. and Harold Grant: Shell Molding and Ductile Iron–New Profit-Making Team, Nov., p 52

Arnold, F. L. and J. S. Prestley: Hypereutectic Aluminum-Silicon Casting Alloys Phosphorus Refinement, March, p 61

Ayvazian, A.: Centrifugally Cast Steel Cylinders Rapid Gas Heating Techniques, Aug., p 73

B

Bailey, W. A. and E. N. Bossing: High Strength Aluminum Alloy Airframe Castings, Oct., p 86

Bailey, W. A., E. N., Bossing and F. H. Roebuck: High Strength Aluminum Casting Alloy M517-T61, Dec., p 110

Baker, J. T., P. J. Neff and J. J. Downs: Ladle Refractory Performance Improvement Test Program, Dec., p 96

Ban, T. E., B. W. Worthington and C. D. Thompson: New Process For Foundry Iron, March, p 95

Barlow, T. E. and H. W. Dietert: Jolt Impact Test For Molding Sand Toughness, June, p 80

Barone, R. V., M. C. Flemings, S. Z. Uram and H. F. Taylor: Solidification of Steel Castings and Ingots, Sept., p 82

Barone, R. V., T. F. Godfrey and R. A. Rosenberg: Bronze Alloys Electric Melting and Quality Control, March, p 103

Bates, J. H.: Unitize and Palletize to Cut Materials Handling Costs, July, p 42

Belkin, E.: Cast Nickel Containing Aluminum Bronze Properties and Microstructure, Aug., p 87

Bell, R. C., G. P. Lewis and D. A. Craw: Porosity in Zinc Die Castings, Nov., p 71

Berry, J. T. and T. Watmough: Factors Affecting Soundness In Alloys With Long And Short Freezing Range, Jan., p 63

Betterley, R.: See Trends In Education. Birch, Norman A.: Aluminum Bronze Hard Spots, Sept., p 117

Bochumer, Verein: Cast Steel Bells Ring True, Sept., p 51

Bossing, E. N. and W. A. Bailey: High Strength Aluminum Alloy Airframe Castings, Oct., p 86

Bossing, E. N., W. A. Bailey and F. H. Roebuck: High Strength Aluminum Casting Alloy M517-T61, Dec., p 110

Brokloff, J. E., R. A. Flinn, and L. H. VanVlack: Refractories As Sources Of Macroinclusions, April, p 62

Brown, B. F., G. Sandoz and W. A. Pennington: Malleable Iron Graphitization Kinetics, Jan., p 93

Burr, A. C. and D. J. Neil: Initial Bubble Test For Determination Of Hydrogen Content In Molten Aluminum, June, p 86

Burton, H. A.: Plastic Patternmaking, The Polyurethane Concept, July, p 72

C

Caine, J. B.: Cast Metals and Cast Shapes, June, p 73

Caine, J. B., E. H. King and J. S. Schumacher: Steel Foundry Sand Clay Bonding, Jan., p 111

Caine, J. B.: Scores Timidity of Designers and Engineers, May, p 87

Carr, Leo E.: Casting A Heartbeat, Dec., p 36

Carpenter, S. R.: Horizon Requirements For Castings, Sept., p 96

Chandley, G. D., D. G. Fleck and B. W. Crocker, Watertown Arsenal: First Success With Cast Uranium, Oct., p 41

Chandley, G. D. and D. G. Fleck: Structural Uranium Alloy Melting, Casting and Heat Treating Techniques, Aug., p 56

Colligan, G. A., L. H. Van Vlack and R. A. Flinn: Factors Affecting Metal–Mold Reactions, Jan., p 104

Colwell, D. L. and R. J. Kissling: Die and Permanent Mold Casting Aluminum Alloy Minor Elements, Dec., p 60

Colwell, D. L.: Melting Practice For Aluminum Die and Permanent Mold Casting, April, p 50

Craw, D. A., G. P. Lewis and R. C. Bell: Porosity in Zinc Die Castings, Nov., p 71

Crocker, B. W., G. D. Chandley and D. G. Fleck, Watertown Arsenal: First Success With Cast Uranium, Oct., p 41

D

Dietert, H. W. and T. E. Barlow: Jolt Impact Test For Molding Sand Toughness, June, p 80

Dietrich, H. F.: See Dietrich's Corner

Dolph, J. L. and C. H. Schweinsberg: Aluminum Furnace Refractories, Aug., p 81

Donnelly, F. H., D. Longeuville: CO_2 Techniques Mean New Profits For Small Foundries, July, p 34

Donoho, C. K.: Ductile Iron Graphite Form Classification, July, p 65

Downs, J. J., P. J. Neff and J. T. Baker: Ladle Refractory Performance Improvement Test Program, Dec., p 96

Draper, A. B. and H. A. Knappenberger: Green Sand Properties, Aug., p 49

Dunn, Jr., E. J.: Rapid Desulfurization To 0.002 Per Cent Sulfur, June, p 90

Dunn, W. D.: Portable Hoppers Slash Core Room Costs 15%, July, p 37

E

Elijah, L. M.: Maximizing Soundness in Aluminum Die Castings, July, p 96

Elliott, Jack: Carbon Sand Provides On-The-Job Economy, Aug., p 31

Erickson, O. E.: Induction Melting and Degassing Installation, Oct., p 127

F

Finlay, T.: Fin Gating—New Cost-Cutting Steel Technique, Sept., p 53

Fleck, D. G., G. D. Chandley and B. W. Crocker, Watertown Arsenal: First Success With Uranium, Oct., p 41

Fleck, D. G. and G. D. Chandley: Structural Uranium Alloy Melting, Casting and Heat Treating Techniques, Aug., p 56

Flemings, M. C., R. V. Barone, S. Z. Uram and H. F. Taylor: Solidification of Steel Castings and Ingots, Sept., p 82

Flemings, M. C., E. Niijama and H. F. Taylor: Fluidity of Aluminum Alloys, Dec., p 75

Flemings, M. C., F. R. Mollard and H. F. Taylor: Mold Variables Influence On Fluidity of Aluminum, Nov., p 100

Flinn, R. A., G. A. Colligan and L. H. VanVlack: Factors Affecting Metal-Mold Reactions, Jan., p 104

Flinn, R. A. and H. Kunsmann: Copper-Base Casting Alloys, April, p 72

Flinn, R. A., W. B. Pierce and L. H. VanVlack: Cast Steel Non-metallic Macroinclusions Sources and Prevention, April, p 57

Flinn, R. A., L. H. VanVlack, and J. E. Brokloff: Refractories As Sources of Macroinclusions, April, p 62

Foster, M. L. and S. Goldspiel: Weldable As-Cast Nickel Aluminum Bronze Composition and Microstructure, Feb., p 72

Fox, Donald K.: High Strength Yellow Brass Castings Weld Repair, Oct., p 89

G

Gentry, E. G. and C. L. Lear: Calcined Fluid Coke As New Molding Medium, July, p 88

Gildea, R. J.: You Can Save Money Moving Bulk Materials, Oct., p 48

Godfrey, T. F., R. V. Barone and R. A. Rosenberg: Bronze Alloys Electric Melting and Quality Control, March, p 103

Goldspiel, S., and M. L. Foster: Weldable As-Cast Nickel Aluminum Bronze Composition and Microstructure, Feb., p 72

Grant, Harold and Arthur A Adams: Shell Molding and Ductile Iron—New Profit-Making Team, Nov., p 52

Green, H. E.: See Let's Look At . . .

Grotto, L. A.: Engine Castings Development by Experimental Stress Analysis, Dec., p 86

Guglin, N. N., S. I. Smolensky, G. F. Zasetsky, A. K. Provoryn and V. A. Tutev: "Cloud Nine"—Permanent Mold Casting of Steel, Feb., p 40

H

Haley, G. D. and J. L. Leach: Carbon Dioxide Process, March, p 121

Haney, C. E.: Cost Control Through Process Quality Control, Oct., p 110

Harkess, E. E.: Hot Core Box and Engineering, Feb., p 115

Heine, H. J., C. A. Sanders, R. F. Marande: Shooter, Ceroxide, Cermet or Slag, July, p 108

Heine, R. W., T. W. Mueller and J. W. Widmeyer: Heavy White Iron Section Casting and Annealing, April, p 85

Heine, R. W. and C. R. Loper, Jr.: Graphite Formation During Solidification of Cast Iron, Nov., p 117

Heine, R. W. and T. W. Mueller: As-Cast Cast Iron Compact Graphite, Oct., p 103

Heine, R. W., J. S. Schumacher and E. H. King: Molding and Core Sand High Temperature Strength Testing, Oct., p 96

Henby, Elijah B: Dust and Vapor Control For Shell Molding Operations, Oct., p 65

Herrick, K.: Magnesium-Base Alloys Investment Cast Properties, March, p 111

Hesse, A. H.: New High Strength Dezincification Resistant Bronze Casting Alloy, Dec., p 51

Hlinka, J. W., V. Paschkis and F. S. Puhr: How Much Superheat Is Lost In The Runner?, Dec., p 119

I

Iler, A. J.: Aluminum Alloy 356+Be Permanent Mold Casting, Aug., p 98

J

Jackson, G. J., F. E. Murphy and R. A. Rosenberg: Bronze Valve Vertical Gating in Shell Molds, July, p 81

Jasson, P.: Core Production In Hot Core Boxes, July, p 55

K

Keachie, E. C.: Establishing Work Standards by Sampling, Dec., p 114

Kiesler, A. J: Desulphurizing Carbon Steel to Extra-Low Limits, July, p 46

King, E. H., J. B. Caine and J. S. Schumacher: Steel Foundry Sand Clay Bonding, Jan., p 111

King, E. H., J. B. Caine and J. S. Schumacher: Molding And Core Sand High Temperature Strength Testing, Oct., p 96

Kissling, R. J. and D. L. Colwell: Die and Permanent Mold Casting Aluminum Alloy Minor Elements: Dec., p 60

Knappenberger, H. A. and A. B. Draper: Green Sand Properties, Aug., p 49

Kreger, Elmer: New Concept Reduces Casting Cleaning Costs, March, p 51

Krueger, Lawrence S.: Meeting the Challenge of Controlling Quality, Nov., p 83

Kunsmann, H. and R. A. Flinn: Copper Base Casting Alloys, April, p 72

Kurfman, V. B.: Light Alloy Grain Size Control and Supercooling Measurements, April, p 98

L

Lane, J. W.: Sales Engineering Success Story at Superior Steel, July, p 38

Lane, J. W.: Automatic Grinding Saves Time, Men, and Money, Aug., p 40

Leach, J. L., and G. D. Haley: Carbon Dioxide Process, March, p 121

Lear, C. L. and E. G. Gentry: Calcined Fluid Coke As New Molding Medium, July, p 88

Lent, Richard: Cast Nuclear Components Radiography By Means of Kilocurie Cobalt Sources, Oct., p 118

Lewis, G. P., D. A. Craw and R. C. Bell: Porosity In Zinc Die Castings, Nov., p 71

Lindsay, R. W. and K. E. Pinnow: Chilling Behavior Of A Roll-Type Cast Iron, Jan., p 75

Linsky, B. and G. Aase: Foundry Air Pollution Control In The San Francisco Bay Area, Nov., p 111

Lipson, S., L. Polonsky and H. Markus: Lightweight Cellular Metal, Feb., p 57

Longeuville, D. and F. H. Donnelly: CO_2 Techniques Mean New Profits For Small Foundries, July, p 34

Loper, Jr., C. R. and R. W. Heine: Graphite Formation During Solidification of Cast Iron, Nov., p 117

M

Mannweiler, Gordon B.: Malleable Iron—Past, Present, Future, March, p 49

Marande, R. F., C. A. Sanders, and H. J. Heine: Shooter, Ceroxide, Cermet or Slag, July, p 108

Marinelli, Leo: Delivering Sand By Truck Brings Multiple Savings, Aug., p 38

Markus, H., L. Polonsky and S. Lipson: Lightweight Cellular Metal, Feb., p 57

McCarthy, S. A.: Aircraft-Missile Steel Castings, Feb., p 110

McMillan, W. D.: New Sand Practices Produce Five-Way Profits, Feb., p 33

Merchant, H. D. and J. F. Wallace: Solidification of Gray Iron, June, p 63

Merchant, H. D., L. I. Toriello and J. F. Wallace: Inoculation Influence On Gray Iron Structure At Various Carbon Equivalences, May, p 109

Mollard, F. R., M. C. Flemings and H. F. Taylor: Mold Variables Influence On Fluidity of Aluminum, Nov., p 100

Moore, W. F.: Specialty Melting As A Service Function In A Research Laboratory, Oct., p 75

Mueller, T. W. and R. W. Heine: As-Cast Cast Iron Compact Graphite, Oct., p 103

Mueller, T. W., R. W. Heine, and J. W. Widmeyer: Heavy White Iron Section Casting and Annealing, April, p 85

Murphy, F. E., G. J. Jackson and R. A. Rosenberg: Bronze Valve Vertical Gating In Shell Molds, July, p 81

N

Neff, P. J., J. J. Downs and J. T. Baker: Ladle Refractory Performance Improvement Test Program, Dec., p 96

Neil, D. J. and A. C. Burr: Initial Bubble Test for Determination of Hydrogen Content In Molten Aluminum, June, p 86

Niijama, E., M. C. Flemings, and H. F. Taylor: Fluidity of Aluminum Alloys, Dec., p 75

O

Olson, Ray: Machined Patterns Can Be Competitive, March, p 89

P

Paschkis, V., J. W. Hlinka and F. S. Puhr: How Much Superheat Is Lost In The Runner?, Oct., p 119

Pennington, W. A., G. Sandoz, B. F. Brown: Malleable Iron Graphitization Kinetics, Jan., p 93

Pierce, W. B., R. A. Flinn and L. H. VanVlack: Cast Steel Non-metallic Macroinclusions Sources and Prevention, April, p 57

Pinnow, K. E. and R. W. Lindsay: Chilling Behavior Of A Roll-Type Cast Iron, Jan., p 75

Polonsky, L., S. Lipson and H. Markus: Lightweight Cellular Metal, Feb., p 57

Present, H., and H. Rosenthal: Feeding Distance of Bars In Investment Molds, March, p 70

Prestley, J. S. and F. L. Arnold: Hypereutectic Aluminum-Silicon Casting Alloys Phosphorus Refinement, March, p 61

Provorny, A. K., V. A. Tutev, S. I. Smolensky, N. N. Guglin, G. F. Zasetsky: "Cloud Nine" – Permanent Mold Casting of Steel, Feb., p 40

Puhr, F. S., J. W. Hlinka, V. Paschkis: How Much Superheat Is Lost In The Runner?, Oct., p 119

R

Ramachandran, A. and M. R. Seshadri: Mold Materials Thermal Properties, Dec., p 66

Rizley, J. H.: Does Your Foundry Qualify?, Oct., p 45

Roebuck, F. H., W. A. Bailey and E. N. Bossing: High Strength Aluminum Casting Alloy M517-T61, Dec., p 110

Rosenberg, R. A., F. E. Murphy and G. J. Jackson: Bronze Valve Vertical Gating In Shell Molds, July, p 81

Rosenberg, R. A., R. V. Barone and T. F. Godfrey: Bronze Alloys Electric Melting and Quality Control, March, p 103

Rosenthal, H. and H. Present: Feeding Distance of Bars In Investment Molds, March, p 70

Roser, W. R.: High Strength Structural Steel Castings For Aerospace Applications, Aug., p 109

S

Sanders, C. A., H. J. Heine and R. F. Marande: Shooter, Ceroxide, Cermet or Slag, July, p 108

Sandoz, G., B. F. Brown and W. A. Pennington: Malleable Iron Graphitization Kinetics, Jan., p 93

Schaller, G. S.: Olivine Wins Scandinavian Approval, Sept., p 56

Schulze, R.: Calcium Carbide Use In Acid Cupolas, July, p 75

Schumacher, J. S., J. B. Caine, and E. H. King: Steel Foundry Sand Clay Bonding, Jan., p 111

Schumacher, J. S., R. W. Heine and E. H. King: Molding And Core Sand High Temperature Strength Testing, Oct., p 96

Schweinsberg, C. H. and J. L. Dolph: Aluminum Furnace Refractories, Aug., p 81

Seeds, O. J.: Low Melting Alloys For Pattern Shop Use, Aug., p 65

Seshadri, M. R. and A. Ramachandran: Mold Materials Thermal Properties, Dec., p 66

Short, A.: Precision In The Foundry, Sept., p 69

Sicha, W. E.: Aluminum Pattern Castings, Oct., p 71

Smith, K. M.: Maintenance Materials Control Systems, Dec., p 104

Smolensky, S. I., N. N. Guglin, G. F. Zasetski, A. K. Provorny and V. A. Tutev: "Cloud Nine" Permanent Mold Casting of Steel, Feb., p 40

Snartemo, J. H.: How Allis-Chalmers Saves Money Through Value Analysis, Feb., p 36

Squier, John M.: How To Cut Downtime on Handling Equipment, Nov., p 58

Stahl, G. W.: Tilt Pouring Permanent Mold Aluminum Castings, Oct., p 68

T

Taylor, D. A.: CO_2 Process Improvements, Sept., p 125

Taylor, H. F., M. C. Flemings and E. Niijama: Fluidity of Aluminum Alloys, Dec., p 75

Taylor, H. F., M. C. Flemings and F. R. Mollard: Mold Variables Influence On Fluidity of Aluminum, Nov., p 100

Taylor, H. F., M. C. Flemings, R. V. Barone, S. Z. Uram: Solidification of Steel Castings and Ingots, Sept., p 82

Thompson, C. D., T. E. Ban and B. W. Worthington: New Process For Foundry Iron, March, p 95

Toriello, L. I., H. D. Merchant and J. F. Wallace: Inoculation Influence on Gray Iron Structure at Various Carbon Equivalences, May, p 109

Tutev, V. A., A. K. Provorny, S. I. Smolensky, N. N. Guglin, G. F. Zasetsky: "Cloud Nine" Permanent Mold Casting of Steel, Feb., p 40

U

Uram, S. Z., M. C. Flemings, R. V. Barone and H. F. Taylor: Solidification of Steel Castings and Ingots, Sept., p 82

V

Van Haver, John: Modernization Slashes Costs, Castings Replace Stampings, Feb., p 44

Vanick, J.: Key Metalcasting Trends as Revealed at Zurich, Jan., p 46

VanVlack, L. H., J. E. Brokloff and R. A. Flinn: Refractories As Sources of Macroinclusions, April, p 62

VanVlack, L. H., G. A. Colligan and R. A. Flinn: Factors Affecting Metal–Mold Reactions, Jan., p 104

VanVlack, L. H., R. A. Flinn and W. B. Pierce: Cast Steel Non-metallic Macroinclusions Sources and Prevention, April, p 57

Vingas, G. J. and A. H. Zrimsek: Systematic Approach To Sand Design and Control, Jan., p 85

Vingas, G. J. and A. H. Zrimsek: Systematic Approach To Sand Design and Control, Feb., p 93

Vingas, G. J. and A. H. Zrimsek: Systematic Approach To Sand Design and Control, Progress Report 4–Wood Flour, March, p 73

Vingas, G. J. and A. H. Zrimsek: Systematic Approach To Sand Design and Control, April, p 93

W

Wall, John: Permanent Mold Design, April, p 103

Wallace, J. F. and H. D. Merchant: Solidification of Gray Iron, June, p 63

Wallace, J. F., L. I. Toriello, H. D. Merchant: Inoculation Influence on Gray Iron Structure at Various Carbon Equivalences, May, p 109

Walley, John R.: More Incentives for Workers – More Profits for Foundries, March, p 42

Watmough, T. and J. T. Berry: Factors Affecting Soundness In Alloys With Long and Short Freezing Range, Jan., p 63

Weber, H. J.: See Safety-Hygiene-Air-Pollution

Whitehead, D. J.: Magnesium-Silver-Didymium-Zirconium Casting Alloy QE22A, Sept., p 102

Widmeyer, J. W., R. W. Heine, and T. W. Mueller: Heavy White Iron Section Casting and Annealing, April, p 85

Williams, D. C.: Granular Movement During Squeezing, Jan., p 60

Worthington, B. W., T. E. Ban and C. D. Thompson: New Process For Foundry Iron, March, p 95

Z

Zasetsky, G. F., A. K. Provorny, S. I. Smolensky, N. N. Guglin and V. A. Tutev: "Cloud Nine" Permanent Mold Casting of Steel, Feb., p 40

Zrimsek, A. H. and G. J. Vingas: Systematic Approach To Sand Design and Control, Jan., p 85

Zrimsek, A. H. and G. J. Vingas: Systematic Approach To Sand Design and Control, Feb., p 93

Zrimsek, A. H. and G. J. Vingas: Systematic Approach To Sand Design and Control, Progress Report 4–Wood Flour, March, p 73

Zrimsek, A. H. and G. J. Vingas: Systematic Approach To Sand Design and Control, April p 93

Published by MODERN CASTINGS Magazine
Golf & Wolf Rds., Des Plaines, Ill.